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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.
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09/404,182	09/24/99	ADAPATHYA	R RP9-99-111
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DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK NC 27709

WM01/0425

EXAMINER

ABDULSELAM, A

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 04/25/01

Rep Due 7/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

05 MAY -1 AM 1:07

PC COMPANY
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Office Action Summary

Application No.

09/404,182

Applicant(s)

Ravi Adapathya And Brian Leonard

Examiner

Abbas Abdulsalam

Group Art Unit

2674



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-51 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-51 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2674

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick (USPN 5530455) in view of Adams (USPN 6031518).

In regards to claims 1, 17, 29, 38, and 47, Gillick teaches a computer mouse with finger buttons including a side button (25), and a roller (24), see Fig 1. Gillick also teaches that the position of a trackball can be extended in any desirable dimension, see column 1, line 45 through 55. Gillick does not teach about a thumb ball support, and a concave thumb channel. However, Adams teaches about a computer mouse with a concave shape of the contact surfaces (29,31), and a user's thumb, see Fig 6, and Column 7, line 15 through 20. Adams also shows the top and the side views of the concave mouse in terms of radial measurement of a sphere, see Column 10, line 40 through 50, and Fig 9, (98). Furthermore, Adams teaches about the assignment of an area needed for right hand thumb, Column 6 line 60 though Column 7 line 20.

Regarding claims 5, 10-11, 20, 24-25, 30, 34-35, 42, 44-45, 48, and 50-51, Adams teaches about the curve with respect to the side view, and top view of the mouse, see Figure 5, and Figure 4 respectively. Adam teaches that the slope of the curve varies from the element (88) to a curve dimensions (102) and (100), and the variance of the slope is turn is equivalent to the

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variance of angles. Regarding claims 2-4, 8-9, 14-16, 18-19, 23, 27-28, 32-33, 37, 39-40, and 41, Adams teaches the top view, the side view, the back elevation view, and the front elevation view in Fig 4, 5, 9, and 10 respectively. Adams states that the device is contiguous in design and is related to its curve structure, see column 12, line 65, and Column 14 line 10 through 15.

Regarding claims 6-7, 12-13, 21-22, 26, 31, 36, 43, 46, and 49, Adams teaches that the periphery of the outer surface (86) in relation to the inner surface (84), and mentioned that the peripheral edge of the upper surface is shaped as round along the junction of top surface, see Column 4, line 15 through 25 and Column 5, line 30 through 40.

Therefore it would have been obvious to one having skill in the art at the time of the invention was made to modify Gillick's device to include Adams' concave shape contact surface for a user's thumb. One would have been motivated in view of the suggestion in Adams that concave shape is the same as the desired concave channel, and the thumb support area; and the use of concave shape mouse helps comfortably support a wide range of hand sizes as taught by Adams.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat No. 5,122,654 to Koh et al

U.S. Pat No. 5,287,090 to Grant

U.S. Pat No. 5,355,147 to Lear

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U.S. Pat No. 5,648,798 to Hamling

U.S. Pat No. 5,841,425 to Zenz

U.S. Pat No. 6,193,196 to Hesley

3. Any response to this action should be mailed to

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Any enquires concerning this matter should be addressed to Abbas Abdulsalam Tel (703) 305-8591. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (703)305-4709. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-6606 and (703) 308-9051.

Any inquiry of general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703)305-4700.



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600